



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,644	02/25/2004	Dan Aharoni	EMC-02-141CIP1	3114
24227	7590	07/31/2008	EXAMINER	
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748			POLLACK, MELVIN H	
ART UNIT	PAPER NUMBER			
	2145			
MAIL DATE	DELIVERY MODE			
07/31/2008	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/786,644	<b>Applicant(s)</b> AHARONI ET AL.
	<b>Examiner</b> MELVIN H. POLLACK	<b>Art Unit</b> 2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 17 March 2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 25 February 2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)                         |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-166/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application               |
| Paper No(s)/Mail Date: _____   | 6) <input checked="" type="checkbox"/> Other: <i>see attached office action</i> |

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.
2. In the response to the last office action, the applicant changed the scope of the claims by adding user configuration and target selection to all independent claims. The examiner has determined that the change in scope is materially sufficient to necessitate search and consideration of the added limitations and/or clarifications. As a result, a final amendment is necessitated even if the examiner provides a new art rejection. The examiner acknowledges that no new matter has been added by this amendment.
3. In response to the amendment, the original 102 rejection has been replaced with a 103 rejection that teaches the aspects below.
4. In interpreting the new limitations, examiner notes that the user interface may belong to any of a number of people, from an end-user client or customer, to a server-side network administrator.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartsell et al. (2002/0065864) in view of Carlson et al. (7,133,907).

7. For claims 1, 9, Hartsell teaches a method and system (abstract) or determining a configuration for a target data storage system (Paras. 1-38) based on input related to a source data storage system including one or more data storage systems (Paras. 43, 62, 67), the method comprising includes the steps of:

- a. receiving, from a user interface, identifiers of one or more source data storage systems (Paras. 94-108);
- b. receiving utilization or response time data related to the one or more source data storage systems (Paras. 209-223);
- c. receiving performance characteristics of work performed on the one or more source data storage systems (Paras. 180-226); and
- d. determining and displaying a configuration for the target data storage system, wherein components of the target data storage system are selected in response to the utilization and response time data and the performance characteristics (Paras. 94-108).

8. For claims 2, 10, Hartsell further teaches that determining the configuration of the target data storage system includes determining the configuration of components of the target data storage system (Paras. 94-108).

9. For claims 1, 2, 9, and 10, Hartsell does not expressly disclose a user interface for allowing a user to select and reselect a number of boxes to be included in a target data storage system, wherein the change in boxes results in a change of configuration. Carlson teaches a method and system (abstract) of configuring a storage area network (col. 1, line 1 - col. 4, line 25; col. 21, line 30 - col. 22, line 15) that further teaches this limitation (Figs. 4-14). At the time

the invention was made, one of ordinary skill in the art would have added Carlson to Hartsell in order to better handle the complex system (col. 2, lines 5-35).

10. For claims 3, 6, 11, 14, Hartsell teaches that determining the configuration of components of the target data storage system is used for load balancing the performance of the target data storage system (Paras. 180-226, especially 209-223).

11. For claims 4, 7, 12, 15, Hartsell teaches that determining the configuration of components of the target data storage system is used for determining the storage capacity of the target data storage system (Paras. 180-226, especially 209-223).

12. For claims 5, 8, 13, 16, Hartsell teaches that determining the configuration of components of the target data storage system is used for at least partially optimizing performance of the target data storage system (Paras. 180-226, especially 209-223).

#### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They regard further teachings on load balancers in storage networks.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELVIN H. POLLACK whose telephone number is (571)272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. H. P./  
Examiner, Art Unit 2145  
23 July 2008

/Jason D Cardone/  
Supervisory Patent Examiner, Art Unit 2145